

Emergency Rescue Coordination Infrastructure**FY2001 Request: \$133,700****Reference No: 32471****AP/AL:** Appropriation**Project Type:** Information Systems**Category:** Health/Human Services**Location:** Statewide**Contact:** Nico Bus**House District:** Statewide (HD 1-40)**Contact Phone:** (907)465-2406**Estimated Project Dates:** 07/01/2000 - 06/30/2005**Brief Summary and Statement of Need:**

This project allows the Department to upgrade a small portion of its existing emergency air-to-ground telecommunications infrastructure. Currently the State's Rescue Coordination Center (RCC) is responsible to coordinate the activities of many search and rescue elements following a report of an overdue aircraft. The air-to-ground radio system required to support this activity is very old, lacks redundancy and is less than dependable outside the major urban centers. By upgrading just a few radio devices the RCC's radio infrastructure can be improved to allow air crews direct radio links to their ground based operational coordinating elements.

Funding:	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>Total</u>
Gen Fund	\$133,700						\$133,700
Total:	\$133,700	\$0	\$0	\$0	\$0	\$0	\$133,700

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	6,100	0
<u>One-Time Startup:</u>	<u>0</u>	
Totals:	6,100	0

Additional Information / Prior Funding History:

There is no prior funding for this project.

Project Description/Justification:

The RCC project is an integrated statewide radio telecommunications concept consisting of three parts. To meet the needs of the RCC, the project should be treated as a single element for budgetary purposes.

Part A: Currently the Rescue Coordination Center's VHF,UHF and HF radios are so old that replacement parts can not be procured. In addition, the RCC's single air-to-ground VHF radio (123.10 MHz) system is remote keyed from Mount Susitna via a commercial microwave link. This transmit site is used for Anchorage and near Anchorage Bowl airborne traffic. Over the past two years this critical circuit has been preempted more than nine times because of either a microwave carrier or a Mount Susitna transceiver failure. Once this circuit fails, the RCC has limited air-to-ground radio coverage. To have no operational radio link to an airborne aircraft is unacceptable.

To rectify this on-going problem a new 123.10 MHz VHF radio transceiver should be purchased, relocated and remote keyed to Mount Gordon Lion, located just outside Anchorage on Fort Richardson Army Post, via a Wide Spectrum Wireless connection. To ensure redundancy, a second co-located transceiver located at the same site should be remote keyed via existing land line.

Cost: \$56,700

Part B: During a Search and Rescue mission the RCC and the Alaska State Troopers have only minimal direct VHF

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radio connectivity to their airborne response aircraft (Federal/state owned assets and private aircraft) after they transit the immediate Anchorage airdrome area.

Through the use of the INTELECT system (an Alaskan Theater Military Aircraft Command and Control system) direct VHF radio contact can only be established if the aircraft is within VHF range (line of sight) of a military long range radar site.

If VHF radio contact can not be made using the INTELECT system, the RCC may elect to attempt to indirectly contact its airborne aircraft via a VHF FCC radio located at one of the statewide FCC Flight Service Stations. However, this requires the RCC to telephonically contact an FCC employee who relays messages to the on-station search and rescue aircraft.

Since the FCC Flight Service Stations are used by all general aviation aircraft throughout the State to update their flight status, the RCC's use of this FCC controlled VHF communication media asset must be kept to an absolute minimum.

In-order-to provide a more reliable VHF statewide airborne command and control system for Search and Rescue coordination it is recommended that a study be conducted to determine the feasibility of co-locating a remote keyed 123.10 MHz, (or a secondary VHF simplex frequency as was used in the Western Governor's Conference) radio, at all the FCC Flight Service Stations, FCC Automated Weather Observation Site(s) as-well-as at some, if not all, the Federal Forest Service microwave stations in the south east portion of Alaska.

Dependant upon the findings contained in the feasibility study, it is recommended that a multi-year installation plan be initiated. This plan should address the placement of 123.10 MHz VHF transceivers in those locations not currently covered by conventional VHF air-to-ground transceivers but having either maritime or land mobile radio transceiver capability.

Cost: \$35,000

Part C: The most reliable commercially available airborne telecommunications are SATCOM radio/phone transceivers. Presently the ANG's 4 HC-130 aircraft, 3, HH-60 and 31 Civil Air Patrol (CAP) Corporate owned aircraft do not have any SATCOM radio transceivers. Various vendors can provide these airborne devices without challenge to the aircraft's certification of air worthiness. This device is not as robust when compared to a VHF radio transceiver for Search and Rescue since it can only be used for a single point-to-point communication link. However, it is very desirable because it allows the aircrew to at least place calls and, dependant upon the vendor, monitor an on-screen e-mail service to determine if they are being called by their controlling dispatch.

Recommend the initial purchase and installation of 7 commercial SATCOM radio/phones for the 4, HC-130 and 3, HH-60 aircraft for SFY 2001.

Equipment costs	42,000
Reoccurring yearly costs	6,100 (if needed)

If funded, this project will be coordinated with the following FY2001 capital budget requests:
DOA Land Mobile Radio Migration - \$1.2 million, \$850.0 general fund, \$350 federal receipts
DMVA Integrated Emergency Telecommunications Infrastructure - \$75.0 general fund
DMVA Emergency Wireless Communications - \$71.2 general fund
DHSS Emergency Medical Communications Systems Phase 2 - \$241.6 general fund
DPS Southeast Emergency Communications Upgrade - \$400.4, \$350.4 general fund, \$50.0 interagency receipts from Oil & Hazardous Response Fund